AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (CURRENTLY AMENDED) A bistatic azimuth detection system comprising:

sound source equipment which transmits a sound wave to a target ~~in the sea~~ and transmits first position information on the sound source equipment;

wave receiving equipment which transmits second position information on the wave receiving equipment with a received wave signal which is obtained by receiving a direct wave from the sound source equipment and a reflective sound from the target;

sound source azimuth detection means which detects an azimuth of the sound source equipment viewed from the wave receiving equipment on the basis of the first and second position information;

calculation means which detects a sound source arrival azimuth, which is an arrival azimuth of the direct wave from the sound source equipment, and a target arrival azimuth, which is an arrival azimuth of the reflective sound from the target, on the basis of the received wave signal, to calculate difference between them; and

target azimuth detection means which detects an azimuth of the target on the basis of the azimuth detected by the sound source azimuth detection means, and the difference calculated by the calculation means.

2. (CURRENTLY AMENDED) A bistatic azimuth detection system comprising:

sound source equipment which transmits a sound wave to a target ~~in the sea~~ and transmits first position information on the equipment;

wave receiving equipment which transmits second position information on the wave receiving equipment with a received wave signal which is obtained by receiving a direct wave from the sound source equipment and a reflective sound from the target, and specific azimuth information on a specific azimuth obtained by a compass;

first sound source azimuth detection means which detects an azimuth of the sound source equipment to a specific azimuth in the wave receiving equipment on the basis of the first and second position information;

second sound source azimuth detection means which detects an arrival azimuth of the direct wave to the specific azimuth in the specific azimuth information on the basis of the received wave signal and the specific azimuth information;

target azimuth detection means which detects a target azimuth, which is an arrival azimuth of the reflective sound, to the specific azimuth in the specific azimuth information on the basis of the received wave signal and the specific azimuth information; and

azimuth correction means which corrects the target azimuth with the difference between the azimuth detected by the first detection means and the azimuth detected by the second detection means.

3. (ORIGINAL) The bistatic azimuth detection system according to claim 1, wherein the sound source equipment wirelessly transmits the first position information, and wherein the wave

receiving equipment wirelessly transmits the received wave signal and the second position information.

4. (ORIGINAL) The bistatic azimuth detection system according to claim 1, wherein each of the sound source equipment and the wave receiving equipment receives signals from satellites of the Global Positioning System to acquire longitude and latitude information on the equipment as the position information on the equipment.

5. (CURRENTLY AMENDED) A bistatic azimuth detection method of a bistatic azimuth detection system which includes sound source equipment, which transmits a sound wave to a target ~~in the sea~~ and transmits first position information on the equipment, and wave receiving equipment, which transmits second position information on the wave receiving equipment with a received wave signal which is obtained by receiving a direct wave from the sound source equipment and a reflective sound from the target, comprising:

a first step of detecting an azimuth of the sound source equipment viewed from the wave receiving equipment on the basis of the first and second position information;

a second step of detecting a sound source arrival azimuth, which is an arrival azimuth of the direct wave from the sound source equipment, and a target arrival azimuth, which is an arrival azimuth of the reflective sound from the target, on the basis of the received wave signal to calculate difference between them; and

a third step of detecting an azimuth of the target on the basis of the azimuth detected at the first step, and the difference calculated at the second step.

6. (CURRENTLY AMENDED) A bistatic azimuth detection method of a bistatic azimuth detection system which includes sound source equipment which transmits a sound wave to the target ~~in the sea~~ and transmits first position information on the equipment, and wave receiving equipment which transmits second position information on the wave receiving equipment with a received wave signal which is obtained by receiving a direct wave from the sound source equipment and a reflective sound from the target, and specific azimuth information on a specific azimuth obtained by a compass, comprising:

a first step of detecting an azimuth of the sound source equipment to a specific azimuth in the wave receiving equipment on the basis of the first and second position information;

a second step of detecting an arrival azimuth of the direct wave to the specific azimuth in the specific azimuth information on the basis of the received wave signal and the specific azimuth information;

a third step of detecting a target azimuth, which is an arrival azimuth of the reflective sound, to the specific azimuth in the specific azimuth information on the basis of the received wave signal and the specific azimuth information; and

a fourth step of correcting the target azimuth with difference between the azimuth detected at the first step and the azimuth detected at the second step.

7. (ORIGINAL) The detection method according to claim 5, wherein the sound source equipment wirelessly transmits the first position information, and wherein the wave receiving equipment wirelessly transmits the received wave signal and the second position information.

8. (ORIGINAL) The detection method according to claim 5, wherein each of the sound source equipment and the wave receiving equipment receives signals from satellites of the Global Positioning System to acquire longitude and latitude information on the equipment as the position information on the equipment.

9. (NEW) A bistatic azimuth detection system comprising:

sound source equipment which transmits a sound wave to a target in the sea and transmits first position information on the sound source equipment;

wave receiving equipment which transmits second position information on the wave receiving equipment with a received wave signal which is obtained by receiving a direct wave from the sound source equipment and a reflective sound from the target;

a sound source azimuth detector which detects an azimuth of the sound source equipment viewed from the wave receiving equipment on the basis of the first and second position information;

a calculator which detects a sound source arrival azimuth, which is an arrival azimuth of the direct wave from the sound source equipment, and a target arrival azimuth, which is an arrival azimuth of the reflective sound from the target, on the basis of the received wave signal, to calculate difference between them; and

a target azimuth detector which detects an azimuth of the target on the basis of the azimuth detected by the sound source azimuth detector, and the difference calculated by the calculator.

10. (NEW) A bistatic azimuth detection system comprising:

sound source equipment which transmits a sound wave to a target in the sea and transmits first position information on the equipment;

wave receiving equipment which transmits second position information on the wave receiving equipment with a received wave signal which is obtained by receiving a direct wave from the sound source equipment and a reflective sound from the target, and specific azimuth information on a specific azimuth obtained by a compass;

a first sound source azimuth detector which detects an azimuth of the sound source equipment to a specific azimuth in the wave receiving equipment on the basis of the first and second position information;

a second sound source azimuth detector which detects an arrival azimuth of the direct wave to the specific azimuth in the specific azimuth information on the basis of the received wave signal and the specific azimuth information;

a target azimuth detector which detects a target azimuth, which is an arrival azimuth of the reflective sound, to the specific azimuth in the specific azimuth information on the basis of the received wave signal and the specific azimuth information; and

an azimuth correction device which corrects the target azimuth with the difference between the azimuth detected by the first sound source azimuth detector and the azimuth detected by the second source azimuth detector.

11. (NEW) The bistatic azimuth detection system according to claim 9, wherein the sound source equipment wirelessly transmits the first position information, and wherein the wave receiving equipment wirelessly transmits the received wave signal and the second position information.

12. (NEW) The bistatic azimuth detection system according to claim 9, wherein each of the sound source equipment and the wave receiving equipment receives signals from satellites of the Global Positioning System to acquire longitude and latitude information on the equipment as the position information on the equipment.

13. (NEW) The bistatic azimuth detection system according to claim 1, wherein the target is in the sea.

14. (NEW) The bistatic azimuth detection system according to claim 2, wherein the target is in the sea.

15. (NEW) The detection method according to claim 5, wherein the target is in the sea.

16. (NEW) The detection method according to claim 6, wherein the target is in the sea.